



## Climate change and the transmission of vector-borne diseases: A review

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### Abstract:

This article reviews studies examining the relationship between climate variability and the transmission of vector- and rodent-borne diseases, including malaria, dengue fever, Ross River virus infection, and hemorrhagic fever with renal syndrome. The review has evaluated their study designs, statistical analysis methods, usage of meteorological variables, and results of those studies. The authors found that the limitations of analytical methods exist in most of the articles. Besides climatic variables, few of them have included other factors that can affect the transmission of vector-borne disease (eg, socioeconomic status). In addition, the quantitative relationship between climate and vector-borne diseases is inconsistent. Further research should be conducted among different populations with various climatic/ecological regions by using appropriate statistical models.

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### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Precipitation, Temperature, Unspecified Exposure

**Temperature:** Fluctuations

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Global or Unspecified

#### Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

# Climate Change and Human Health Literature Portal

**Infectious Disease:** Vectorborne Disease

**Vectorborne Disease:** Mosquito-borne Disease

**Mosquito-borne Disease:** Dengue, Malaria, Ross River Virus

**Mitigation/Adaptation:** ☒

mitigation or adaptation strategy is a focus of resource

Adaptation

**Resource Type:** ☒

format or standard characteristic of resource

Review

**Timescale:** ☒

time period studied

Time Scale Unspecified

**Vulnerability/Impact Assessment:** ☒

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content